GEOG 3047 Complex socio-ecological systems: past, present and future

Prof John Dearing

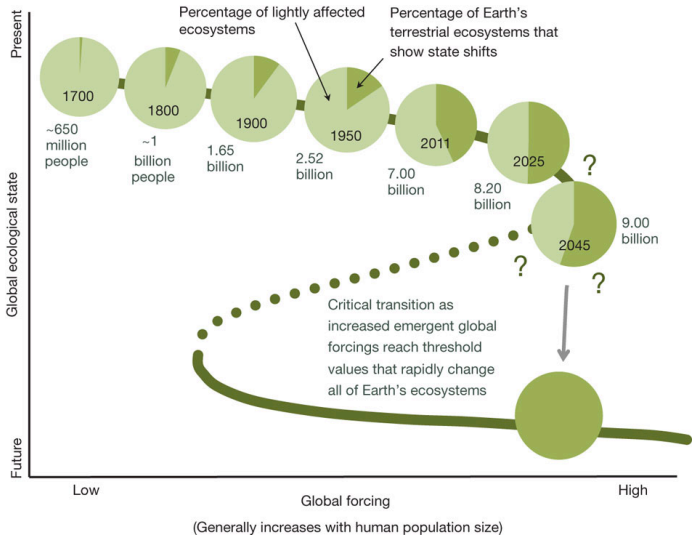
In a nutshell

What do people mean when they talk about tipping points, resilience and complexity?

These terms have crept into common parlance to describe the state of the world and its institutions – from financial crashes to the loss of Arctic sea ice and ecosystem services. But why?

The module gives theoretical background and practical study with respect to aspects of 'complexity science' that are rapidly influencing the way we look at the world.

The module focuses on the use of palaeoscience records and other archives to reach beyond the level of the 'history of the environment' in order to provide concepts, modelling tools and strategi e s for the sustainable management of ecological services, ecosystems and landscapes.



Approaching a state shift in the Earth's biosphere? Barnosky et al 2012 Nature 486, 52–58

Employment value

Taught in a non-mathematical way, the unit provides students with the skills and information to engage productively in discussions, strategic analysis, and policy and decisionmaking across all job sectors.

The Student View

"The best module that I have taken throughout my 3 years at university! The coursework was brilliant and had a unique and interesting structure that I really enjoyed."

'John Dearing is a great teacher who structures and explains the topic very well, especially as some of the concepts covered can be difficult to understand.'

Anonymous feedback (2012)